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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/357,990	07/21/1999	KATSUYUKI SUZUKI	Q053838	9989

7590 08/19/2003

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EXAMINER

CHUNG, PHUNG M

ART UNIT	PAPER NUMBER
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2133

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DATE MAILED: 08/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/357,990

Applicant(s)

SUZUKI, KATSUYUKI

Examiner

Phung M. Chung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-12 and 14-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3, 5-12 and 14, 16-18 is/are rejected.
- 7) ☐ Claim(s) 4 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. This office action is responsive to the reconsideration dated on 7/28/03. The final rejection dated on 3/26/03 is now withdrawn.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this

Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 3, 5-9, 12 and 14, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamoto et al (5,812,757).

As per claims 1, and 8-9, Okamoto et al disclose a processing board, a computer and a fault recovery method for the computer, comprising:

A plurality of first elements (col. 51, lines 19-20, processing units) each of which diagnoses itself (col. 51, line 2); and

A second element (majority unit) coupled to each first element (each processing unit) for comparing signals from the processing units, wherein the majority unit further comprises an error recognition means for

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recognizing an existence of a faulty processing unit among the processing units based on the comparison result of a comparison means. (See Figs. 1, 2 and 3; col. 49, lines 57-58, col. 50, lines 5-8, lines 28-32 and lines 43-45). Okamoto et al do not specifically disclose that the majority unit which inputs diagnosis results from the processing units to determine the first element whose diagnosis result is in the minority group as a faulty first element. However, Okamoto et al disclose the majority unit which inputs signal from the processing units for comparing the signals from the processing units and selecting one signal as a majority signal and Okamoto et al also teach self diagnose means for diagnosing each processing unit. Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to output the diagnosis results from processing units into the majority unit for comparing the diagnosis results to determine a faulty first element to improve the reliability of the computer. (See col. 26, lines 51-61, col. 27, lines 63-67, col. 28, lines 1-2, and col. 50, lines 43-45).

As per claim 3, Okamoto et al further disclose:

Third elements (comparators); and

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Fourths elements (error detectors) which correspond to the first elements and which determine whether or not the corresponding first elements fails based on outputs from the third elements.

As per claim 5, Okamoto et al further disclose: a memory element for storing data (cache).

As per claims 6 and 7, Okamoto et al further disclose: a sixth element which cannot diagnose itself (143).

As per claims 12, 14, and 16-17, these method claims are also rejected under the same rationale as set forth in the system claims 1, 3 and 5-9.

4. Claims 10, 11 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamoto et al (5,812,757) as applied to claims 1, 3 and 5-9 above, and further in view of the admitted prior art.

As per claims 10-11, the teaching of Okamoto et al have been discussed above. Okamoto et al do not specifically disclose an eighth elements which selects, as a trigger, a first signal set by a user or a second signal from a semiconductor chip which controls start up. However, the admitted prior art does teach this feature (pg. 1, lines 17-22). Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was

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made, to incorporate the teaching of the admitted prior art into the invention of Okamoto et al so that start-up system can be controlled.

As per claim 18, this method claim is also rejected under the same rationale at set forth in the system claim 10.

5. Claims 4 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Applicant's arguments filed on 7/28/03 have been fully considered but they are not persuasive this is because:

Applicant argues that a majority circuit of Okamoto is not used with diagnosis results of self-diagnoses by processing units 1-1, 1-2, 1-3.

Examiner disagrees with applicant because Okamoto et al do not specifically disclose that the majority unit which inputs diagnosis results from the processing units to determine the first element whose diagnosis result is in the minority group as a faulty first element. However, Okamoto et al disclose the majority unit which inputs signal from the processing units for comparing the signals from the processing units and selecting one signal as a majority signal and Okamoto et al also teach self diagnose

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means for diagnosing each processing unit. Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to output the diagnosis results from processing units into the majority unit for comparing the diagnosis results to determine a faulty first element to improve the reliability of the computer. (See col. 26, lines 51-61, col. 27, lines 63-67, col. 28, lines 1-2, and col. 50, lines 43-45).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phung M. Chung whose telephone number is (703) 305-9686. The examiner can normally be reached on M-T and Th-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (703) 305-9595. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800.

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Phung M. Chung
Primary Examiner
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A handwritten signature in black ink, appearing to read 'Phung M. Chung', with a long horizontal flourish extending to the right.